



United States Department of the Interior

Leavenworth Fisheries Complex
U.S. Fish and Wildlife Service
12790 Fish Hatchery Road
Leavenworth, Washington 98826



January 30, 2017

U.S. EPA Region 10
Attn: Director, Office of Water and Watersheds
1200 Sixth Avenue (OWW-191)
Seattle, Washington 98101

Director: Office of Water and Watersheds,

The U.S. Fish and Wildlife Service (USFWS), Leavenworth National Fish Hatchery (LNFH) has reviewed the Preliminary Draft NPDES Permit No. WA0001902 and its' associated Fact Sheet. Unfortunately an extensive review to allow for more substantive comments could not be accommodated through a comment review period that occurred during the Christmas and New Year time period and during end of the year obligations. LNFH's comments on both documents are attached and fall into three general categories: (1) clarifications and/or corrections needed, (2) temperature and total phosphorus, and (3) compliance schedule. If further information is needed, please contact Malenna Cappellini, Environmental Compliance Biologist at malenna_cappellini@fws.gov or (509) 548-7641.

Sincerely,

David B. Irving
Complex Manager

Preliminary Draft NPDES Permit No. WA0001902:

pg. 4, Schedule of Submissions, #2: The annual report due date of January 20th does not allow for the LNFH to obtain the most recent water quality monitoring results from laboratories and/or contractors and it also does not allow for the synthesis and analysis of all water quality monitoring during the year. LNFH requests that this due date be changed to March 1st.

pg. 4, Schedule of Submissions, #3: The “90 days after the effective date of the Final Permit” for the Quality Assurance Plan (QAP) is not a sufficient amount of time for the LNFH to go through the federal contracting process, hire a contractor, receive and review a draft QAP, and finalize a QAP. LNFH requests that this due date be changed to 120 days.

pg. 4, Schedule of Submissions, #4: The “90 days after the effective date of the Final Permit” for the Best Management Practices (BMPs) is not a sufficient amount of time for the LNFH to go through the federal contracting process, hire a contractor, receive and review draft BMPs, and finalize the BMPs. This task will most likely be combined with #3 above. LNFH requests that this due date be changed to 120 days.

pg. 4, Schedule of Submissions, #13: See #2 above. LNFH requests that this due date be changed to March 1st.

pg. 7, I.D.1: Compliance with water quality monitoring is dependent on many factors outside the LNFH’s control (i.e. environmental like icing, funding like a federal government shutdown, etc.). Contingencies need to be accounted for in the water quality monitoring compliance. For example, “If contingencies outside the LNFH’s control prevent them from complying with the water quality monitoring in this report, the LNFH will contact the U.S. Environmental Protection Agency (EPA) and resume monitoring as soon as possible”.

pgs. 8 to 9, I.D.1. Table 1 (Temperature): The interim temperature limits and the final temperature limits do not reflect the best scientific facts available for Icicle Creek, especially the background water quality conditions. Icicle Creek naturally, above all human influence, does not meet either the interim or final temperature limits. Consequently, the water withdrawn (LNFH’s receiving water) from Icicle Creek by LNFH does not meet either the interim or final temperature limits. Additionally, neither of these fixed limits reflect the “natural conditions” language in the temperature TMDL developed by the Washington Department of Ecology (Ecology). “Temperature shall not exceed 16.0°C (freshwater) or 13.0°C (marine water), no temperature increases will be allowed which will raise the receiving water temperature by greater than 0.3°C (WAC 173-201A-030(1)(c)(iv))”. Ecology further states that during critical periods, natural conditions may exceed the numeric temperature criteria mandated by the water quality standards. In these cases, the antidegradation provisions of those standards apply. “Whenever the natural conditions of said waters are of lower quality than the criteria assigned, the natural conditions shall constitute the water quality criteria (WAC 173-201A-070(2)).” If LNFH’s discharges were held to a non-fixed limit of not increasing the temperature of the receiving waters by more than 0.3°C, the limit would be scientifically and realistically valid and could be met by the LNFH.

pg. 9, I.D.1, Table 1 (Total Phosphorus): Similar to the temperature limits above, the fixed total phosphorus limits do not reflect the best scientific facts available for Icicle Creek, especially the background water quality conditions. The water withdrawn (LNFH's receiving water) from Icicle Creek by LNFH does not meet the total phosphorus limits. The LNFH should not be required to remove naturally occurring and point and non-point sources of total phosphorus that is not attributable to hatchery operations and it is not realistic or technologically feasible for the LNFH to do so. A new, non-fixed total phosphorus limit needs to be developed that reflects the water quality background of the water withdrawn from Icicle Creek by LNFH. As LNFH is a mitigation facility for Grand Coulee Dam, supports a very important and one of the last of its kind tribal fishery, and supports a tribal Coho salmon reintroduction program, a scientifically based increase in total phosphorus, attributable to hatchery operations, above background conditions should be considered.

pg. 9, I.D.1, Table 1 (Turbidity): Please clarify "cleaning events". Is this a requirement during general pond cleaning or does this follow under "cleaning events include those of the sand settling basin, the conveyance channel, behind the fish screens, and the pollution abatement ponds (Table 5, note #5)".

pg. 10, I.D.2.: Please clarify which outfall this is referring to, outfall 005, 001, and/or 002.

pg. 10, I.D.2 Table 2: Include in the water quality requirements an exception for an emergency (i.e. complete water loss to the hatchery) fish release. Under the rare event of an emergency fish release, there will not be enough personnel available or time to complete the required water quality monitoring.

pg. 10, I.D.2 Table 2 (Flow): If this requirement refers to outfall 005, the LNFH may not be able to fulfill this requirement as a variable speed pump is used during fish release to move fish from holding areas to Icicle Creek.

pgs. 10 and 11, I.D.2 Table 2 (Temperature): The interim temperature limits and the final temperature limits do not reflect the best scientific facts available for Icicle Creek, especially the background water quality conditions. Icicle Creek naturally, above all human influence, does not meet either the interim or final temperature limits. Consequently, the water withdrawn (LNFH's receiving water) from Icicle Creek by LNFH does not meet either the interim or final temperature limits. Additionally, neither of these fixed limits reflect the "natural conditions" language in the temperature TMDL developed by the Washington Department of Ecology (Ecology). "Temperature shall not exceed 16.0°C (freshwater) or 13.0°C (marine water), no temperature increases will be allowed which will raise the receiving water temperature by greater than 0.3°C (WAC 173-201A-030(1)(c)(iv))". Ecology further states that during critical periods, natural conditions may exceed the numeric temperature criteria mandated by the water quality standards. In these cases, the antidegradation provisions of those standards apply. "Whenever the natural conditions of said waters are of lower quality than the criteria assigned, the natural conditions shall constitute the water quality criteria (WAC 173-201A-070(2))." If LNFH's discharges were held to a non-fixed limit of not increasing the temperature of the receiving waters by more than 0.3°C, the limit would be scientifically and realistically valid and could be met by the LNFH.

pg. 10, I.D.2 Table 2, Notes #15 and 16: Clarify in detail what these two statements mean and how the requirements are to be followed.

pg.11, I.D.2 Table 2 (Total Phosphorus): Similar to the temperature limits above, the fixed total phosphorus limits do not reflect the best scientific facts available for Icicle Creek, especially the background water quality conditions. The water withdrawn (LNFH's receiving water) from Icicle Creek by LNFH does not meet the total phosphorus limits. The LNFH should not be required to remove naturally occurring and point and non-point sources of total phosphorus that is not attributable to hatchery operations and it is not realistic or technologically feasible for the LNFH to do so. A new, non-fixed total phosphorus limit needs to be developed that reflects the water quality background of the water withdrawn from Icicle Creek by LNFH. As LNFH is a mitigation facility for Grand Coulee Dam, supports a very important and one of the last of its kind tribal fishery, and supports a tribal Coho salmon reintroduction program, a scientifically based increase in total phosphorus, attributable to hatchery operations, above background conditions should be considered.

pgs.11, I.D.2 Table 2 Note #25: This statement needs to be clarified. LNFH does not feed fish or clean rearing ponds during fish release.

pgs. 12 and 13, I.D.3 Table 3 (Temperature): The interim temperature limits and the final temperature limits do not reflect the best scientific facts available for Icicle Creek, especially the background water quality conditions. Icicle Creek naturally, above all human influence, does not meet either the interim or final temperature limits. Consequently, the water withdrawn (LNFH's receiving water) from Icicle Creek by LNFH does not meet either the interim or final temperature limits. Additionally, neither of these fixed limits reflect the "natural conditions" language in the temperature TMDL developed by the Washington Department of Ecology (Ecology). "Temperature shall not exceed 16.0⁰C (freshwater) or 13.0⁰C (marine water), no temperature increases will be allowed which will raise the receiving water temperature by greater than 0.3⁰C (WAC 173-201A-030(1)(c)(iv)))". Ecology further states that during critical periods, natural conditions may exceed the numeric temperature criteria mandated by the water quality standards. In these cases, the antidegradation provisions of those standards apply. "Whenever the natural conditions of said waters are of lower quality than the criteria assigned, the natural conditions shall constitute the water quality criteria (WAC 173-201A-070(2))." If LNFH's discharges were held to a non-fixed limit of not increasing the temperature of the receiving waters by more than 0.3⁰C, the limit would be scientifically and realistically valid and could be met by the LNFH.

pg. 12, I.D.3 Table 3, Note #28: Clarify this statement. Does "raceway cleaning event" represent multiple ponds?

pg.13, I.D.3 Table 3 (Total Phosphorus): Similar to the temperature limits above, the fixed total phosphorus limits do not reflect the best scientific facts available for Icicle Creek, especially the background water quality conditions. The water withdrawn (LNFH's receiving water) from Icicle Creek by LNFH does not meet the total phosphorus limits. The LNFH should not be required to remove naturally occurring and point and non-point sources of total phosphorus that

is not attributable to hatchery operations and it is not realistic or technologically feasible for the LNFH to do so. A new, non-fixed total phosphorus limit needs to be developed that reflects the water quality background of the water withdrawn from Icicle Creek by LNFH. As LNFH is a mitigation facility for Grand Coulee Dam, supports a very important and one of the last of its kind tribal fishery, and supports a tribal Coho salmon reintroduction program, a scientifically based increase in total phosphorus, attributable to hatchery operations, above background conditions should be considered.

pg.13, I.D.3 Table 3 (Turbidity): Please clarify “cleaning events”. Is this a requirement during general pond cleaning or does this follow under “cleaning events include those of the sand settling basin, the conveyance channel, behind the fish screens, and the pollution abatement ponds (Table 5, note #5)”.

pg. 14, I.E.: It is stated that “effluent limitations and monitoring requirements” must be complied with “immediately upon the effective date of the Permit”. This timeline is inconsistent with the 90 day timeline for a QAP and BMPs. Is LNFH being requested to begin water quality monitoring without a QAP or BMPs. Additionally this “immediate” timeline does not allow for equipment to be purchased, appropriate laboratories to be located, personnel to be trained, etc. It would be more appropriate and scientifically sound if the beginning of the required compliance be equal to the submittal date of a final QAP and BMPs.

pgs. 14 and 15, I.E.4: The annual report due date of January 20th does not allow for the LNFH to obtain the most recent water quality monitoring results from laboratories and/or contractors and it also does not allow for the synthesis and analysis of all water quality monitoring during the year. LNFH requests that this due date be changed to March 1st.

pg. 16, I.E.5.Table 4 (Task #1): This work would have to be contracted out and could not be finalized until after the previous year’s results are obtained from laboratories and analyzed. One calendar year after the permit date is not a sufficient amount of time to accomplish this task fully and correctly.

pg. 16, I.E.5.Table 4 (Task #2): The timeline does not allow for a sufficient amount of time to fully or correctly accomplish this task.

pg. 17, I.E.5.Table 4 (Task #2B): The timeline does not allow for a sufficient amount of time for a “feasibility” study of this magnitude.

pg. 17, I.E.5.Table 4 (Task #3): This section needs to be reviewed and rewritten. Although the USFWS operates the LNFH, the U.S. Bureau of Reclamation (BOR) is the federal agency responsible for funding the LNFH. Additionally, federal agencies are not guaranteed funding and therefore can’t commit to funding. Federal funding is dependent on congressional appropriations. The USFWS LNFH can commit to pursuing the necessary funding to implement facility upgrades as applicable.

pg. 17, I.E.5.Table 4 (Task #3.2): The LNFH can’t commit to certifying that funding is in place within 5 years for the reasons stated above. Additionally, this timeline does not meet the funding

cycle for LNFH that is in place. The BOR funds the LNFH through a five year interagency agreement with the USFWS Leavenworth Fisheries Complex. The current interagency agreement expires in 2017 and the next agreement will run from 2018 to 2022. The interagency agreement funds standard operation and maintenance activities but there is some limited potential to fund small improvement projects. For large capital improvement projects, the LNFH can request additional funding from the BOR who may have available funding or who may need to, especially for multi-million dollar projects, request project specific congressional funding. All federal funding is dependent on congressional appropriations and is not guaranteed. The USFWS LNFH can only commit to pursuing the necessary funding to implement facility upgrades as applicable.

pg. 18, I.E.5.Table 4 (Task #4): This section will need to be reviewed and rewritten. This task is dependent on federal funding that is not guaranteed. This tasks timeline does not take into considerations the LNFH's funding cycle or the time required to complete a National Environmental Policy Act (NEPA) and other necessary permitting processes. Furthermore, the LNFH is requesting that EPA review the proposed, fixed temperature and total phosphorus limitations as they do not reflect the best scientific facts available for Icicle Creek, especially the background water quality conditions. These unjustifiable effluent limitations are the basis for the assumption that LNFH needs facility upgrades to meet unrealistic goals. No aspect of facility upgrades can begin until the need is justifiable based on the best available science and the specific goal to be achieved is determined.

pg. 18, I.E.5.Table 4 (Task #5): See comments for Tasks 1 through 4 above.

pg. 18, I.E.5.Table 4 (Task #6): An explanation of how a compliance timeline of 9 years and 11 months is compatible with a 5 year permit expiration date is needed. If a permit expires in five years so do the requirements of the permit. The permit can only require what is feasibly achievable within five years or the permits expiration date needs to be extended.

pg. 22, II.B. Table 5 (Turbidity): A clarification as to which outfall is being referred to needed.

pg. 22, II.B. Table 5 (Note #5): A clarification as to which fish screens are being referred to is needed.

pg. 23, III.A.: The "90 days after the effective date of the Final Permit" for the Quality Assurance Plan (QAP) is not a sufficient amount of time for the LNFH to go through the federal contracting process, hire a contractor, receive and review a draft QAP, and finalize a QAP. LNFH requests that this due date be changed to 120 days.

pg. 24, III.B.: The "90 days after the effective date of the Final Permit" for the Best Management Practices (BMPs) is not a sufficient amount of time for the LNFH to go through the federal contracting process, hire a contractor, receive and review draft BMPs, and finalize the BMPs. This task will most likely be combined with #3 above. LNFH requests that this due date be changed to 120 days.

pg. 24, III.B.4.b: The annual report due date of January 20th does not allow for the LNFH to obtain the most recent water quality monitoring results from laboratories and/or contractors and it also does not allow for the synthesis and analysis of all water quality monitoring during the year. LNFH requests that this due date be changed to March 1st.

pg. 32, IV.F: The annual report due date of January 20th does not allow for the LNFH to obtain the most recent water quality monitoring results from laboratories and/or contractors and it also does not allow for the synthesis and analysis of all water quality monitoring during the year. LNFH requests that this due date be changed to March 1st.

Preliminary Draft NPDES Fact Sheet for Permit No. WA0001902:

pg. 12, first paragraph: This paragraph needs to be reworded for accuracy. The LNFH supports the Yakama Nation's Coho Salmon Reintroduction Project by providing hatchery facilities for part of its expanded Coho salmon production program. Approximately, 800 to 1000 returning adults captured at other locations in the Wenatchee River Watershed are held at the LNFH and are spawned between mid-October to mid-November.....

pg. 13, II.A.: Three of 22 large Foster-Lucas rearing units are used.

pg. 15, II.C.: The LNFH no longer needs this discharge point (Outfall 003) permitted. Outfall 003 will not be used.

pg. 16, II.F.: This section should be written (change the tense) to reflect that this is a proposed new outfall which has not been used yet. For example, instead of saying that the Outfall 006 "is used to keep flow" say the Outfall "will be used to" or the "intended use of the Outfall is".

pg. 16, III.C.: This section should probably be updated to reflect the most recent litigation history.

pg. 20, V.A.1.c.: This section needs to include the following language from the temperature TMDL developed by Ecology and should be considered when re-determining effluent limitations. "Temperature shall not exceed 16.0⁰C (freshwater) or 13.0⁰C (marine water), no temperature increases will be allowed which will raise the receiving water temperature by greater than 0.3⁰C (WAC 173-201A-030(1)(c)(iv)))". Ecology further states that during critical periods, natural conditions may exceed the numeric temperature criteria mandated by the water quality standards. In these cases, the antidegradation provisions of those standards apply. "Whenever the natural conditions of said waters are of lower quality than the criteria assigned, the natural conditions shall constitute the water quality criteria (WAC 173-201A-070(2))." Additionally, it should be noted that Icicle Creek naturally, above all human influence, does not meet the fixed TMDL. Consequently, the water withdrawn (LNFH's receiving water) from Icicle Creek by LNFH does not meet the fixed TMDL when background conditions are not considered.

pg. 23, V.B. 2nd paragraph on page: It should be noted and taken into consideration that USGS gaging station being referred to is also above the water withdrawal location for the City of Leavenworth and for Icicle Peshastin Irrigation District.

pg. 24, V.B. 1st paragraph on page: A clarification is needed as to if an “end of pipe” limit can be changed to a “mixing zone allowance” limit through Ecology’s 401 certification process. The positive effects of LNFH on the Icicle Creek environment should be accounted for.

pg. 24, V.C.: EPA and Ecology need to reassess the TMDLs developed for Icicle Creek as the best available science was not used in their development and natural, background conditions were not considered.

pg. 25, V.C. (Temperature): This section needs to include the following language from the temperature TMDL developed by Ecology and should be considered when re-determining effluent limitations. “Temperature shall not exceed 16.0⁰C (freshwater) or 13.0⁰C (marine water), no temperature increases will be allowed which will raise the receiving water temperature by greater than 0.3⁰C (WAC 173-201A-030(1)(c)(iv))”. Ecology further states that during critical periods, natural conditions may exceed the numeric temperature criteria mandated by the water quality standards. In these cases, the antidegradation provisions of those standards apply. “Whenever the natural conditions of said waters are of lower quality than the criteria assigned, the natural conditions shall constitute the water quality criteria (WAC 173-201A-070(2)).” Additionally, it should be noted that Icicle Creek naturally, above all human influence, does not meet the fixed TMDL. Consequently, the water withdrawn (LNFH’s receiving water) from Icicle Creek by LNFH does not meet the fixed TMDL when background conditions are not considered.

pg. 25, V.C. (D.O., pH, and Total Phosphorus): Similar to the temperature limits above, the fixed total phosphorus limits do not reflect the best scientific facts available for Icicle Creek, especially the background water quality conditions. The water withdrawn (LNFH’s receiving water) from Icicle Creek by LNFH does not meet the total phosphorus limits. The LNFH should not be required to remove naturally occurring and point and non-point sources of total phosphorus that is not attributable to hatchery operations and it is not realistic or technologically feasible for the LNFH to do so. A new, non-fixed total phosphorus limit needs to be developed that reflects the water quality background of the water withdrawn from Icicle Creek by LNFH. As LNFH is a mitigation facility for Grand Coulee Dam, supports a very important and one of the last of its kind tribal fishery, and supports a tribal Coho salmon reintroduction program, a scientifically based increase in total phosphorus, attributable to hatchery operations, above background conditions should be considered.

pg. 35, VI.D. last paragraph on page: The statement “Because much of the water in Icicle Creek above the LNFH is diverted into the Hatchery during the critical warm summer months,.....” is an incorrect statement. During this time period the LNFH is withdrawing less stream flow than it is supplementing from Snow and Nada Lakes. Providing supplemental flows of up to 50 cfs, to ensure that LNFH can withdraw its full water right from Icicle Creek during this time frame, benefits the Icicle Creek system by reducing water temperatures and increasing flow levels when stream flows are typically reduced due to upstream irrigation diversions. Irrigation diversions can remove 48% and 79% of the mean August and September flows, respectively (Mullan *et al.*

1992). Brennan (1938) reported that summer flows in Icicle Creek in 1937, prior to construction of the LNFH, were as low as 20 cfs and that there was not 100 cfs of stream flow in Icicle Creek below the water diversions during the entire irrigation season. Water right-based diversions in Icicle Creek above the future site of the LNFH were established in 1905 (12.4 cfs for the COIC), 1910 (117 cfs for the IPID), and 1912 (3 cfs for the City of Leavenworth). The LNFH's water use is determined by the life stage and how many fish are on the station. Agricultural water use is determined by the stage of the crop growing season. Consequently, the LNFH's surface water withdrawal needs are the lowest when agricultural needs peak. However, it is important to note that water in Icicle Creek is over-allocated. If water users maximized their surface water rights, the stream flow in Icicle Creek would be reduced by 55% in August and 95% in September in an average water year even with the supplementation by LNFH.

pg. 40: Temperature discussions need to include comparisons with Icicle Creek stream flows above all water withdrawals and in the upper reaches of the creek and with the water quality of the water entering the LNFH's surface water delivery system. Also, the interim temperature limits and the final temperature limits do not reflect the best scientific facts available for Icicle Creek, especially the background water quality conditions. Icicle Creek naturally, above all human influence, does not meet either the interim or final temperature limits. Consequently, the water withdrawn (LNFH's receiving water) from Icicle Creek by LNFH does not meet either the interim or final temperature limits. Additionally, neither of these fixed limits reflect the "natural conditions" language in the temperature TMDL developed by the Washington Department of Ecology (Ecology). "Temperature shall not exceed 16.0⁰C (freshwater) or 13.0⁰C (marine water), no temperature increases will be allowed which will raise the receiving water temperature by greater than 0.3⁰C (WAC 173-201A-030(1)©(iv))". Ecology further states that during critical periods, natural conditions may exceed the numeric temperature criteria mandated by the water quality standards. In these cases, the antidegradation provisions of those standards apply. "Whenever the natural conditions of said waters are of lower quality than the criteria assigned, the natural conditions shall constitute the water quality criteria (WAC 173-201A-070(2))." If LNFH's discharges were held to a non-fixed limit of not increasing the temperature of the receiving waters by more than 0.3⁰C, the limit would be scientifically and realistically valid and could be met by the LNFH.

pg. 40 (Total Phosphorus): Similar to the temperature limits above, the fixed total phosphorus limits do not reflect the best scientific facts available for Icicle Creek, especially the background water quality conditions. The water withdrawn (LNFH's receiving water) from Icicle Creek by LNFH does not meet the total phosphorus limits. The LNFH should not be required to remove naturally occurring and point and non-point sources of total phosphorus that is not attributable to hatchery operations and it is not realistic or technologically feasible for the LNFH to do so. A new, non-fixed total phosphorus limit needs to be developed that reflects the water quality background of the water withdrawn from Icicle Creek by LNFH. As LNFH is a mitigation facility for Grand Coulee Dam, supports a very important and one of the last of its kind tribal fishery, and supports a tribal Coho salmon reintroduction program, a scientifically based increase in total phosphorus, attributable to hatchery operations, above background conditions should be considered.

pg. 44 (Temperature): The interim temperature limits and the final temperature limits do not reflect the best scientific facts available for Icicle Creek, especially the background water quality conditions. Icicle Creek naturally, above all human influence, does not meet either the interim or final temperature limits. Consequently, the water withdrawn (LNFH's receiving water) from Icicle Creek by LNFH does not meet either the interim or final temperature limits. Additionally, neither of these fixed limits reflect the "natural conditions" language in the temperature TMDL developed by the Washington Department of Ecology (Ecology). "Temperature shall not exceed 16.0°C (freshwater) or 13.0°C (marine water), no temperature increases will be allowed which will raise the receiving water temperature by greater than 0.3°C (WAC 173-201A-030(1)(c)(iv)))". Ecology further states that during critical periods, natural conditions may exceed the numeric temperature criteria mandated by the water quality standards. In these cases, the antidegradation provisions of those standards apply. "Whenever the natural conditions of said waters are of lower quality than the criteria assigned, the natural conditions shall constitute the water quality criteria (WAC 173-201A-070(2))." If LNFH's discharges were held to a non-fixed limit of not increasing the temperature of the receiving waters by more than 0.3°C, the limit would be scientifically and realistically valid and could be met by the LNFH.

pg. 44 (Total Phosphorus): Similar to the temperature limits above, the fixed total phosphorus limits do not reflect the best scientific facts available for Icicle Creek, especially the background water quality conditions. The water withdrawn (LNFH's receiving water) from Icicle Creek by LNFH does not meet the total phosphorus limits. The LNFH should not be required to remove naturally occurring and point and non-point sources of total phosphorus that is not attributable to hatchery operations and it is not realistic or technologically feasible for the LNFH to do so. A new, non-fixed total phosphorus limit needs to be developed that reflects the water quality background of the water withdrawn from Icicle Creek by LNFH. As LNFH is a mitigation facility for Grand Coulee Dam, supports a very important and one of the last of its kind tribal fishery, and supports a tribal Coho salmon reintroduction program, a scientifically based increase in total phosphorus, attributable to hatchery operations, above background conditions should be considered.

pg. 45 1st full paragraph: It should be noted that in 2010 a second pollution abatement pond was completed. The data referred to from 2006 to 2011 most likely is not representative of the effluent characteristics since two abatement ponds are currently used.

pg. 46 bottom and top of pg. 47: This paragraph is confusing and needs to be clarified. It seems to be stating that comments submitted to EPA on the Compliance Schedule are irrelevant because the Compliance Schedule is finalized by Ecology in the 401 certification process. Also, it needs to be clarified why the draft NPDES permit documents and the 401 certification documents did not go out for public review together. If both permit processes are so intertwined and dependent on each other, it seems to be a disservice to the public to not combine them into one comment process. It will be difficult for the public to be truly informed of what the combined outcome of both processes will be without them being presented together.

pg. 65 timelines: The timelines for the QAP and BMPs development has already been addressed elsewhere in LNFH's comments. The timeline is insufficient and needs to be extended from 90 days to a minimum of 120 days.

pgs. 73 and 74, B. Essential Fish Habitat: The determination that “there is no designated EFH in the vicinity of the LNFH discharge” needs to be verified with NOAA Fisheries personnel as it is incorrect and actions need to be taken accordingly.

pg. 74, D. Permit Expiration: An explanation of how a compliance timeline of 9 years and 11 months is compatible with a 5 year permit expiration date is needed. If a permit expires in five years so do the requirements of the permit. The permit can only require what is feasibly achievable within five years or the permits expiration date needs to be extended.

pg. 87: The first picture shows the gravity fed flow into the LNFH’s surface water withdrawal system. No pumping.

pg. 88: Fish are not released through Outfall 001. Fish are released through Outfall 005. In an emergency fish release the adult return fish ladder may be used as a release point.